

United States Patent and Trademark Office

W

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,232	06/25/2004	Johannes Birzer	2001P24061WOUS/1140668-00 7502	
⁷⁴⁷⁰ WHITE & CA	7590 07/18/2007 C & CASE LLP		EXAMINER	
PATENT DEPARTMENT 1155 AVENUE OF THE AMERICAS NEW YORK, NY 10036			IQBAL, NADEEM	
			ART UNIT	PAPER NUMBER
			2114	
			MAIL DATE	DELIVERY MODE
	•		07/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/500,232	BIRZER ET AL.				
Office Action Summary	Examiner	Art Unit				
•		2114				
The MAILING DATE of this communication app	Nadeem lqbal ears on the cover sheet with the c	_				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be time till apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 25 June 2004.						
2a) This action is FINAL . 2b) ⊠ This	This action is FINAL . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
 4) Claim(s) 1-39 is/are pending in the application. 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 						
6)⊠ _. Claim(s) <u>16-39</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner	r.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents	s have been received.	· · · · · · · · · · · · · · · · · · ·				
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
The state of the second						
Attachment(s) 1) Notice of References Cited (RTO 802)						
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 	4)					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 6/04.	5) Notice of Informal Page 6) Other:					

Art Unit: 2114

DETAILED ACTION

Claims 1-15 are canceled and new claims 16-39 are added by an amendment filed on June 25, 2004, therefore these claims will not be considered any further.

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 25 & 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 3. Claim 25 recites the limitation "high-priority cyclical system functions" in line 1. There is insufficient antecedent basis for this limitation in the claim.
- 4. Claim 28 recites the limitation "aborted non-cyclical functions" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 16-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Stewart et al., (Applicant IDS, The chimera II real-time operating system for Advanced Sensor-based control Applications, 1992, IEEE).

Application/Control Number: 10/500,232

Art Unit: 2114

3. As per claim 16, Stewart discloses a method of error handling in a real-time automation system that comprises the step of triggering at least one error reaction function by at least one of the group consisting of at least one processing error and at least one access error (page 1285, col. 1, lines 3-9). Stewart also discloses that the at least one error reaction function is parameterizable (page 1285, col. 1, lines 16-19).

Page 3

- 4. As per claim 17, Stewart discloses that the at least one error reaction function comprises a programmable function (page 1287, col. 2, lines 29-31).
- As per claims 18 & 21, Stewart discloses a method of error handling in a real-time automation system having at least two execution levels, the method comprises the step of triggering at least one error reaction function on one of the two execution levels in response to at least one of the group consisting of at least one processing error and at least one access error (page 1285, col. 1, lines 3-9). Stewart also discloses that the at least one access error occurring on one of the at least two execution levels (page 1289, col. 2, lines 24-28).
- 6. As per claims 19 & 20, Stewart discloses that the error reaction function is handled on the at least two execution levels that has lower priority that the respective level on which either or both of the processing and access errors occurred (page 1289, col. 2, lines 30-33).
- 7. As per claim 22, Stewart discloses that the error reaction function is parameterized before triggering (page 1285, col. 1, lines 16-19).
- 8. As per claim 23, Stewart discloses that the error reaction function is programmed before triggering (page 1287, col. 2, lines 29-31).
- 9. As per claim 24, Stewart discloses that at least one access error is corrected with the aid of parameterizable access function (page 1288, col. 1, lines 8-12).

Application/Control Number: 10/500,232

Art Unit: 2114

10. As per claims 25 & 26, Stewart discloses high-priority cyclical system functions are executed without being influenced by the error reaction function (page 1288, col. 1, lines 10-12, lines 26-31).

Page 4

- 11. As per claim 27, Stewart discloses that at functions that comprise an error are aborted, whereby reliable behavior of the automation system is ensured (page 1287, col. 2, lines 48-52).
- 12. As per claims 28 & 29, Stewart discloses that aborted non-cyclical functions are restarted, taking a respectively preceding terminated non-cyclic function as a basis (page 1288, col. 1, lines 8-12).
- 13. As per claim 30, Stewart discloses that wherein the event of an occurrence of errors due to the automation system, a consistent system behavior is produced without stopping the automation system (page 1288, col. 1, lines 10-12).
- 14. As per claim 31, Stewart discloses the real-time automation system comprises at least one of the group consisting of a machine tool and a production machine (page 1282, col. 1, lines 27-30).
- 15. As per claims 32 & 35, Stewart discloses a real-time automation system capable of running a plurality of tasks having different priority levels, the system comprising a plurality of execution levels each comprising a priority level, plurality of tasks are assigned to the plurality of execution levels based on the priority level associated with each of the plurality of tasks (page 1285, col. 2, lines 27-31). Stewart also discloses at least one error reaction function for handling an occurrence of at least one error in one of the plurality of tasks assigned to one of the plurality of execution levels ((page 1285, col. 1, lines 2-6), the at least one error reaction function is

Application/Control Number: 10/500,232 Page 5

Art Unit: 2114

executed on one of the plurality of execution levels comprising a lower priority than the one of the plurality of tasks in which the at least one error has occurred (page 1289, col. 2, lines 24-33).

- 16. As per claim 33, Stewart discloses that one of the plurality of tasks comprises a high priority task that is not terminated during the occurrence of at least one error in one of the plurality of tasks assigned to one of the plurality of execution levels (page 1288, col. 1, lines 10-12, lines 26-31).
- 17. As per claim 34, Stewart discloses the real-time automation system comprises a motion controller (page 1282, col. 1, lines 27-30).
- 18. As per claim 36, Stewart discloses the plurality of properties comprises a user program for responding to the occurrence of the at least one error, the user program is included in the at least one error reaction function (page 1285, col. 1, lines 2-7).
- 19. As per claims 37 & 38, Stewart discloses the plurality of tasks comprise at least one of the group consisting of non-cyclical tasks, interrupt tasks, and low priority cyclical tasks (page 1285, col. 2, lines 28-31).
- 20. As per claim 39, Stewart discloses the at least one error comprises at least one of the group consisting of a processing error and an access error (page 1285, col. 1, lines 17-19).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nadeem Iqbal whose telephone number is (571)-272-3659. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

Art Unit: 2114

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571)-272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nadeem Idbal Primary Examiner Art Unit 2114

NI